#### COMMONWEALTH OF KENTUCKY

#### BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF THE GRANT	)
COUNTY SANITARY SEWER DISTRICT	) CASE NO.
FOR AUTHORITY TO ADJUST RATES	) 2005-00314

### ORDER

On July 25, 2005, Grant County Sanitary Sewer District ("Grant County") submitted its application for Commission approval of its proposed sewer rates. On December 27, 2005, Grant County's application was considered filed by the Commission based upon Grant County's filing of supplemental information. Commission Staff, having performed a limited financial review of Grant County's operations, has prepared the attached Staff Report containing Staff's findings and recommendations regarding the proposed rates. All parties should review the report carefully and provide any written comments or requests for a hearing or informal conference no later than 10 days from the date of this Order.

IT IS THEREFORE ORDERED that all parties shall have no more than 10 days from the date of this Order to provide written comments regarding the attached Staff Report or requests for hearing or informal conference. If no request for a hearing or informal conference is received, this case will be submitted to the Commission for a decision.

Done at Frankfort, Kentucky, this 23<sup>rd</sup> day of March, 2006.

By the Commission

ATTEST:

Executive Director

#### STAFF REPORT

## GRANT COUNTY SANITARY SEWER DISTRICT

#### CASE NO. 2005-00314

On July 25, 2005, Grant County Sanitary Sewer District ("Grant County") submitted its application for Commission approval of its proposed sewer rates. Grant County's application was deficient in several respects. On December 27, 2005, Grant County's application was considered filed by the Commission based upon Grant County's filing of supplemental information. Commission Staff ("Staff") performed a limited financial review of Lewis Sanitation's test year operations for the calendar year ending May 31, 2005. The scope of Staff's review was limited to obtaining information as to whether the test period operating revenues and expenses were representative of normal operations. Insignificant or immaterial discrepancies were not pursued and are not addressed herein.

The application submitted on July 25, 2005 included an adjusted pro forma operating income statement, as shown in Attachment B to this report, wherein adjustments were made to test year operating revenues and expenses that were known and measurable and deemed to be reasonable. The supplemental application filed on December 27, 2005 included an adjusted income statement (also shown in Attachment B) with minor variations to the income statement previously submitted on July 25. The rates proposed by Grant County were based on the pro forma income statement shown in the application. The application also included the calculation of Grant County's revenue requirement using a 1.2 Debt Service Coverage, which is frequently used by the Commission to determine revenue requirements for small utilities. Grant County is

proposing to increase its annual revenue by \$178,941, an increase of 45.7% over test

period revenue from rates of \$391,879.

Grant County provided adequate documentation to support its pro forma

revenues and expenses. Therefore, Commission Staff recommends acceptance of

Grant County's proposed pro forma revenues and expenses with one minor adjustment,

as shown in Attachment B. Specifically, Grant County calculated its 1.2x debt service of

\$150,106 by using an 18-year average, whereas the Commission normally uses a pro-

forma average of the next three years, which results in debt service coverage of

\$150,190. In addition, Staff's review indicated that Grant County could have justified

increased revenues of \$194,335. However, Grant County's proposed revenue increase

of \$178,941 will produce a positive cash flow, and will allow it to meet its operating

expenses and repay its long-term debt. Therefore, Staff recommends acceptance of

the proposed increase.

Eddie Beavers is responsible for all revenue adjustments and the calculation of

the proposed rates, as discussed in Attachments C and D. Jack Kaninberg is

responsible for the determination of the revenue requirement. Based on the information

included herein, Staff is of the opinion that the rates as shown in Attachment A of this

report are reasonable and should be approved by this Commission.

Signatures

Prepared by: Jack Kaninberg Financial Analyst, Water and Sewer

Revenue Requirements Branch Division of Financial Analysis

Prepared by: Eddie Beavers

Rate Analyst, Communications, Water, and Sewer Rate Design Branch

Division of Financial Analysis

# ATTACHMENT A STAFF REPORT CASE NO. 2005-00314 STAFF'S RECOMMENDED RATES

# Monthly Sewer Rates

5/8'X3/4" Wi First Next Next All Over		gallons gallons gallons	\$21.06 8.25 6.76 5.31	Minimum bill per 1,000 gallons per 1,000 gallons per 1,000 gallons
All Ovel	10,000	galions	5.51	per 1,000 gallons
1" Water Me	eter			
First	5,000	gallons	\$45.81	Minimum bill
Next	5,000	gallons	6.76	per 1,000 gallons
All Over	10,000	gallons	5.31	per 1,000 gallons
1 1/2" Wate	r Meter			
First	10,000	gallons	\$79.61	Minimum bill
All Over	10,000	gallons	5.31	per 1,000 gallons
2" Water Me	eter			
First	20,000	gallons	\$132.71	Minimum bill
All Over	20,000	gallons	5.31	per 1,000 gallons

Grant County	Applic.	Supplemt.	Proposed	Proposed	Staff	Staff
Attachment B	1.12	эцрини	Adjstmts.	Proforma	Adjstmts.	Adjusted
Revenue from Rates	\$391,883	\$391,879	0	\$391,879	(\$9,788)	\$382,091
Other Operating Revenue	\$16,611	\$16,612	\$2,852	\$19,464	0	\$19,464
Interest Income	\$1,013	\$1,076	(\$765)	\$311	0	\$311
Total Revenue**	\$409,507	\$409,567	\$2,087	\$411,654	(\$9,788)	\$401,866
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Commissioners' Salaries	\$5,300	\$5,300	\$700	\$6,000	0	\$6,000
Purchased Power	\$56,306	\$56,306	0	\$56,306	0	\$56,306
Chemicals	\$5,043	\$5,043	0	\$5,043	0	\$5,043
Materials and Supplies	\$25,627	\$27,077	(\$7,215)	\$19,862	0	\$19,862
Contract Services – Eng.	\$9,750	\$9,750	0	\$9,750	0	\$9,750
Contract Services – Acct.	\$12,574	\$12,574	(\$2,574)	\$10,000	0	\$10,000
Contract Services - Legal	\$10,088	\$9,713	\$375	\$10,088	0	\$10,088
Contract Services - Mgmt	\$142,507	\$142,507	(\$6,741)	\$135,766	0	\$135,766
Contract Services - Other	\$45,744	\$45,744	\$984	\$46,728	0	\$46,728
Contract Services – Tests	\$3,705	\$3,705	0	\$3,705	0	\$3,705
Rent	\$833	\$833	0	\$833	0	\$833
Transportation Exp.	\$5,485	\$5,669	(\$3,086)	\$2,583	0	\$2,583
Insurance – Vehicles	\$1,556	\$1,556	\$124	\$1,680	0	\$1,680
Insurance – Gen. Liability	\$2,871	\$2,871	\$106	\$2,977	0	\$2,977
Insurance – Property	0	0	\$3,730	\$3,730	0	\$3,730
Advertising	\$110	\$110	0	\$110	0	\$110
Bad Debt	\$2,500	\$2,500	\$1,210	\$3,710	0	\$3,710
Misc. Expense	0	\$12	(\$12)	0	0	0
Total Sewer O&M	\$329,999	\$331,270	(\$12,399)	\$318,871	0	\$318,871
Depreciation Exp.	\$116,587	\$116,587	\$2,476	\$119,063	0	\$119,063
Amortization Exp.	\$4,638	\$4,638	\$1,946	\$6,584	0	\$6,584
Taxes OT Income	\$405	\$405	\$54	\$459	0	\$459
Total Operating Exp.	\$451,629	\$452,900	(\$7,923)	\$444,977	0	\$444,977
Net Operating Income	(\$42,122)	(\$43,333)	\$10,010	(\$33,323)	(\$9,788)	(\$43,111)
Interest Expense		(\$69,950)	\$2,271	(\$67,679)	0	(\$67,679)
Amortiz. of Debt Exp.		(\$1,034)	0	(\$1,034)	0	(\$1,034)
Total Other Expense		(\$70,984)	\$2,271	(\$68,713)	0	(\$68,713)
Net Income		(\$114,317)	\$12,281	(\$102,036)	(\$9,788)	(\$111,824)
Total Onevating Fun				¢444.077	0	¢444.077
Total Operating Exp.				\$444,977 \$1,034	0	\$444,977 \$1,034
Amortiz. Debt Exp.  Debt Service					\$84	\$1,034 \$150,190
Coverage*				\$150,106	<b>\$84</b>	\$150,190
Revenue Requirement				\$596,117	\$84	\$596,201
Normalized Revenues				φ590,117	Ф04	\$401,866
Increase				\$178,941		\$194,335
IIICI Case				φ1/0,941		φ174,333

# **Explanatory Notes:**

\*Grant County's Application at Exhibit 5-S calculated debt service coverage at \$150,106 using an average of 18 years remaining debt service, or \$125,088 times 1.2; Staff used the 2006-2008 average of \$125,158 x 1.2, or \$150,190

\*\*Grant County's Application and Supplemental Application included the proposed rate increase in pro forma revenues, whereas Staff's adjusted pro forma does not.

# ATTACHMENT C STAFF REPORT CASE NO. 2005-00314

<u>Rates</u>: In response to Staff's Second Information Requests Grant County states that the rates were established by a trial and error method.

Based on the Billing Analysis and other information provided in the filings made by Grant County, Staff developed proposed rates in this report following the guidelines set out in the AWWA Manual M1.

Staff's review established the total revenue required for Grant County is \$596,117, \$19,464 is obtained though other operating revenue and \$311 is obtained through interest income. Staff developed rates that will collect the remaining \$576,426 from the company's retail and commercial customers. The utility's expenses were analyzed and allocated according to three different classifications: Commodity, Demand, and Customer.

Commodity costs are those directly associated with the cost of sewage treatment. Demand costs are those associated with providing the facilities to meet the peak demands placed on the system. Customer costs are those incurred to serve customers regardless to the varying usage.

The Allocation of Costs sheet allocates the remaining portion of the Revenue Requirement from Rates to the customer in the functional cost components of Commodity, Demand and Customer. The allocation process results in \$61,349 in commodity costs, \$465,349 in demand costs and \$49,728 in customer costs.

## Calculation of Proposed Rates:

Total commodity costs are allocated across the rate steps in accordance with usage percentages. Total demand costs are allocated across the rate steps in

Attachment C Case No. 2005-00314 accordance with usage that has been adjusted to reflect the higher peak demands that are caused in the lower rate steps. Total customer costs are all collected in the first rate step, or minimum bill, since those costs do not differ with varying usage.

The total for the first rate step is \$309,269 which is divided by the number of bills issued on an annual bases which calculates to a minimum bill of \$21.16 for the first ,000 gallons. The totals for the remaining rate steps are each divided by the actual water usage for each rate step to calculate the remainder of the rates.

Attachment C Case No. 2005-00314

# ATTACHMENT D STAFF REPORT CASE NO. 2005-00314 COST OF SERVICE STUDY

	Allocation of	Plant Value		
	Total	Commodity	Demand	Customer
Land	\$25,000			\$25,000
Structures & Improvements	1,164,442		\$1,164,442	
Collection Sewers – Force	328,112		328,112	
Collection Sewers - Gravity	1,705,064		1,705,064	
Other Plant Collection Facilities	64,805		64,805	
Rec Wells & Pump Pits	560,704		560,704	
Tools Shop & Garage Equipment	4,986			4,986
Treatment & Disposal Equipment	13,265		13,265	
Transportation Equipment	11,624			11,624
Subtotal	\$3,878,002		\$3,836,392	\$41,610
Allocation Percentages	100%		0.99	0.01

Source: 2004 Annual Report

	Allocation of	of Depreciation		
	Total	Commodity	Demand	Customer
Pumping Equipment	\$1,825		\$1,825	
Total Mains	63,115		63,115	
Pump Stations	18,221		18,221	
Structures & Improvements	33,577		33,577	
Transportation Equipment	2,325			\$2,325
Access Road - Sewer Plant	30,072		30,072	
TOTAL	\$149,135		\$146,810	\$2,325
Allocation Percentages	100%		0.98	0.02
Source: Initial Application in	2006 No. 2006	5 00214 Evhibit	F	
Source: Initial Application in	i Case No. 2005	5-003 14 EXHIBIL	ວ	

Allocation of O	peration & M	laintenance Ex	pense	
	Total	Commodity	Demand	Customer
Contractual Services -	\$37,442		\$35,273	\$2,169
Management	φ31,44Z		φου,27ο	φ2,109
Contractual Services -	9,750		9,750	
Engineering	9,730		9,730	
Contractual Services -	10,000			10,000
Accounting				10,000
Contractual Services - Testing	3,705		3,705	
Equipment Rental	833		833	
Chemicals	5,043	\$5,043		
Purchased Power	56,306	56,306		
Materials & Supplies	19,862		14,654	5,208
Bad Debt Expense	3,710			3,710
Subtotal	\$146,651	\$61,349	\$64,215	\$21,087
Less Commodity	(61,349)			
Percentage Total	85,302			
Total	\$146,651	\$61,349	\$64,215	\$21,087
Allocation Percentages	100%		75.3%	24.7%
Salaries - Commissioners	\$6,000		\$4,518	\$1,482
Contractual Services - Admin	80,324		60,484	19,840
& Gen	00,324		00,404	19,040
Contractual Services - Legal	10,088		7,596	2,492
Contractual Services - Other	46,728		35,186	11,542
Contractual Services -	18,000		13,554	4,446
Management Office Rent	16,000		13,554	4,440
Transportation Expense	2,583		1,945	638
Insurance - Vehicles	1,680		1,265	415
Insurance - General Liability	2,977		2,242	735
Insurance - Property	3,730		2,809	921
Advertising	110		83	27
Amortization	7,618		5,736	1,882
Taxes other than Income	459		346	113
Operating Expenses	\$326,948	\$61,349	\$199,979	\$65,620

	Allocation of C	Cost of Service		
	Total	Commodity	Demand	Customer
Operation & Maintenance	\$326,948	\$61,349	\$199,979	\$65,620
Depreciation	119,063		116,682	2,381
Debt Service	150,190		148,688	1,502
General Water Service Cost	\$596,201	\$61,349	\$465,349	\$69,503
Less: Interest Income	(311)			(311)
Less: Other Income	(19,464)			(19,464)
Revenue Required from Rates	\$576,426	\$61,349	\$465,349	\$49,728
NOTES:				

<sup>&</sup>lt;sup>1</sup>Debt Service has been allocated on the Retail Allocation Percentage of Plant Value from

plant value allocation sheet.

<sup>2</sup>Depreciation has been allocated on the Retail Allocation Percentage of Depreciation from depreciation allocation sheet.

	Calcu	lation of Wate	er Rates		
	Total	First 2,000	Next 3,000	Next 5,000	Over 10,000
Actual Water Sales:					
Thousand Gallons	62,192,000	26,483,000	21,639,000	7,327,000	6,743,000
Percent	100%	42.58%	34.79%	11.78%	10.84%
Weighted Sales for Demand:		2	1.67	1.33	1
Thousand Gallons	105,591,040	52,966,000	36,137,130	9,744,910	6,743,000
Percent	100%	50.16%	34.22%	9.23%	6.39%
Allocation of Volumetric Costs:					
Commodity	\$61,349	\$26,122	\$21,343	\$7,227	\$6,650
Demand	465,349	233,419	159,242	42,952	29,736
Customer	49,728	49,728			
Total	\$576,426	\$309,269	\$180,585	\$50,179	\$36,386
Number of Bills	14,618				
Number of bills	14,010				
Cost of Service Rates		\$21.16	\$8.35	\$6.85	\$5.40

	Verifica	tion of Rates		
	Bills	Gallons	Cost of Service Rates	Revenue
First 2,000 gallons	14,618	26,483,000	\$21.16	\$309,317
Next 3,000 gallons		21,639,000	8.35	180,686
Next 5,000 gallons		7,327,000	6.85	50,190
Over 10,000 gallons		6,743,000	5.40	36,412
Subtotal		62,192,000		\$576,605
Interest Income	\$311			311
Other Income	19,464			19,464
Total Revenue				\$596,380

Comparison of Rates	
rant County Sanitary Sewer District	
B" x 3/4" Water Meter – Residential	
	Comparison of Rates rant County Sanitary Sewer District B" x 3/4" Water Meter – <b>Residential</b>

Gallon Usage	Current Rates	PSC Adjusted Rates	Increase	Percentage
2,000	\$10.92	21.06	10.14	92.86%
3,000	14.78	29.31	14.53	98.31%
4,000	18.64	37.56	18.92	101.50%
5,000	22.50	45.81	23.31	103.60%
6,000	26.28	52.57	26.29	100.04%
7,000	33.68	63.11	29.43	87.38%
8,000	40.84	73.77	32.93	80.63%
9,000	37.62	72.85	35.23	93.65%
10,000	41.40	79.61	38.21	92.29%
15,000	59.50	106.16	46.66	78.42%
20,000	77.60	132.71	55.11	71.02%
25,000	95.70	159.26	63.56	66.42%
30,000	113.80	185.81	72.01	63.28%
35,000	131.90	212.36	80.46	61.00%
40,000	150.00	238.91	88.91	59.27%
50,000	186.20	292.01	105.81	56.83%
75,000	276.70	424.76	148.06	53.51%
100,000	367.20	557.51	190.31	51.83%

Block Usage	Current Rates	PSC Adjusted Rates
1st 2,000	\$10.92	\$21.06
Next 3,000	3.86	8.25
Next 5,000	3.78	6.76
Over 10,000	3.62	5.31

Effect on Customer Average Bill - 5,000 Gallons Usage					
Current Rates	PSC Adjusted Rates	Amount Increase	% Increase		
\$22.50	\$45.81	\$23.31	103.60%		

# Comparison of Rates Grant County County Sanitary Sewer District 5/8" x 3/4" Water Meter - Commercial

Gallon	Current	PSC Adjusted		
Usage	Rates	Rates	Increase	Percentage
2,000	\$30.00	\$21.06	\$(8.94)	-29.80%
3,000	35.00	29.31	(5.69)	-16.26%
4,000	40.00	37.56	(2.44)	-6.10%
5,000	45.00	45.81	0.81	1.80%
6,000	48.00	52.57	4.57	9.52%
7,000	50.00	63.11	13.11	26.22%
8,000	56.50	73.77	17.27	30.57%
9,000	57.00	72.85	15.85	27.81%
10,000	60.00	79.61	19.61	32.68%
15,000	72.50	106.16	33.66	46.43%
20,000	85.00	132.71	47.71	56.13%
25,000	97.50	159.26	61.76	63.34%
30,000	110.00	185.81	75.81	68.92%
35,000	122.50	212.36	89.86	73.36%
40,000	135.00	238.91	103.91	76.97%
50,000	160.00	292.01	132.01	82.51%
75,000	222.50	424.76	202.26	90.90%
100,000	285.00	557.51	272.51	95.62%

Block Usage	Current Rates	PSC Adjusted Rates
1st 2,000	\$30.00	\$21.06
Next 3,000	5.00	8.25
Next 5,000	3.00	6.76
Over 10,000	2.50	5.31

Effect on Customer Average Bill - 5,000 Gallons Usage				
Current Rates	PSC Adjusted Rates	Amount Increase	% Increase	
\$45.00	\$45.81	\$0.81	1.80%	

# Comparison of Rates Grant County County Sanitary Sewer District 1" Water Meter - **Commercial**

Gallon Usage	Current Rates	PSC Adjusted Rates	Increase	Percentage
5,000	\$45.00	\$45.81	0.81	1.80%
6,000	48.00	52.57	4.57	9.52%
7,000	51.00	59.33	8.33	16.33%
8,000	54.00	66.09	12.09	22.39%
9,000	57.00	72.85	15.85	27.81%
10,000	60.00	79.61	19.61	32.68%
15,000	72.50	106.16	33.66	46.43%
20,000	85.00	132.71	47.71	56.13%
25,000	97.50	159.26	61.76	63.34%
30,000	110.00	185.81	75.81	68.92%
35,000	122.50	212.36	89.86	73.36%
40,000	135.00	238.91	103.91	76.97%
50,000	160.00	292.01	132.01	82.51%
75,000	222.50	424.76	202.26	90.90%
100,000	285.00	557.51	272.51	95.62%
Block Usage	Current Rates	PSC Adjusted Rates		
1st 5,000	\$45.00	\$45.81		
Next 5,000	3.00	6.76		
Over 10,000	2.50	5.31		

Effect on Customer Average Bill - 20,000 Gallons Usage				
Current Rates	PSC Adjusted Rates	Amount Increase	% Increase	
\$85.00	\$132.71	\$47.71	56.13%	

#### Comparison of Rates **Grant County County Sanitary Sewer District** 1 1/2" Water Meter - Commercial **Gallon Usage** Current **PSC Adjusted Increase Percentage Rates Rates** 10,000 \$60.00 79.61 19.61 32.68% 15,000 33.66 46.43% 72.50 106.16 20,000 85.00 132.71 47.71 56.13% 25,000 97.50 159.26 61.76 63.34% 30,000 110.00 75.81 68.92% 185.81 35,000 212.36 73.36% 122.50 89.86 40,000 135.00 238.91 103.91 76.97% 50,000 132.01 82.51% 160.00 292.01 75,000 222.50 424.76 202.26 90.90% 100,000 285.00 557.51 272.51 95.62% **PSC** Adjusted Block Usage **Current Rates** Rates 1st 10,000 \$60.00 \$79.61 Over 10,000 2.50 5.31 Effect on Customer Average Bill - 30,000 Gallons Usage **Current Rates PSC** Amount % Increase Adjusted Increase **Rates**

\$110.00

\$185.81

\$75.81

68.92%

	Cor	npariso	on of Rates		
	Grant County C	county	Sanitary Se	wer District	
	2" Wate	r Metei	r - Commer	rcial	
Gallon Usage	Current	PSC	Adjusted	Increase	Percentage
	Rates	Rates	•		_
20,000	\$85.00		\$132.71	47.71	56.13%
25,000	97.50		159.26	61.76	63.34%
30,000	110.00		185.81	75.81	68.92%
35,000	122.50		212.36	89.86	73.36%
40,000	135.00		238.91	103.91	76.97%
50,000	160.00		292.01	132.01	82.51%
75,000	222.50		424.76	202.26	90.90%
100,000	285.00		557.51	272.51	95.62%

Block Usage	Current Rates	PSC Adjusted	
		Rates	
1st 20,000	\$85.00	\$132.71	
Over 20,000	2.50	5.31	

Effect on Customer Average Bill - 30,000 Gallons Usage				
Current Rates	PSC Adjusted Rates	Amount Increase	% Increase	
\$110.00	\$185.81	\$75.81	68.92%	